Listing of the Claims:

1. (Original) A method for obtaining information for packets transmitted over a network, comprising:

transmitting a plurality of packets from a sender to a receiver, including at least one selected packet;

associating a sender-relative timestamp with each selected packet transmitted;

receiving at least some of the plurality of packets;

associating a receiver-relative timestamp with each selected packet received; and

associating a latency based on the sender-relative timestamp and the receiver-relative timestamp associated with each selected packet received.

2. (Original) The method of claim 1 wherein associating the sender-relative timestamp includes placing a local timestamp of the sender into each selected packet.

3. (Original) The method of claim 1 wherein associating the receiver-relative timestamp includes placing a local timestamp of the receiver into each selected packet.

4. (Original) The method of claim 1 wherein associating the sender-relative timestamp includes placing a local timestamp of the sender into each selected packet, and associating the receiver-relative timestamp includes placing a local timestamp of the receiver into each selected packet.

5. (Original) The method of claim 1 further comprising uniquely identifying each selected packet.

6. (Original) The method of claim 5 wherein uniquely identifying each selected packet includes writing a sequence number.

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7. (Original) The method of claim 1 further comprising normalizing the latency associated with each selected packet.

8. (Original) The method of claim 7 wherein at least two selected packets are received, and wherein normalizing the latency includes selecting the lowest latency from each of the latencies associated with each selected packet.

9. (Original) The method of claim 7 wherein normalizing the latency includes detecting at least one timer jump and adjusting information maintained for each selected packet to compensate therefor.

10. (Original) The method of claim 7 wherein normalizing the latency includes, detecting clock skew, and adjusting information maintained for each selected packet to compensate for the clock skew.

11. (Original) The method of claim 10 wherein a plurality of selected packets are received, and wherein detecting clock skew includes logically finding a slope based on information maintained with the selected packets.

12. (Original) The method of claim 1 further comprising, normalizing the sender-relative timestamp associated with each selected packet.

13. (Original) The method of claim 1 further comprising, normalizing the receiver-relative timestamp associated with each selected packet.

14. (Original) The method of claim 1 wherein the network is a controlled network, and further comprising running a calibration phase during transmission of at least some of the transmitted packets.

15. (Original) The method of claim 1 further comprising, generating noise by transmitting other packets on the network.

16. (Original) The method of claim 1 further comprising, enabling network quality of service.

17. (Original) The method of claim 1 further comprising, detecting dropped packets.

18. (Original) A computer-readable medium having computer-executable instructions for performing the method of claim 1.

19. (Currently Amended) A system for obtaining information transmitted over a network, comprising:

a network sender system, including:

a sender process configured to cause transmission of a plurality of selected packets on the network; and

a sender component configured to associate a sender timestamp of the sender with each selected packet;

and,

a network receiver system configured to receive each selected packet transmitted on the network, the receiver system including:

a receiver component configured to associate a receiver timestamp with each selected packet received; and

a receiver process, the receiver process determining a latency based on the sender timestamp and the receiver timestamp and maintaining information corresponding to the latency, the sender timestamp, and receiver timestamp in association with each selected packet.

20. (Original) The system of claim 19 further comprising, a process that normalizes the sender timestamp and receiver timestamp associated with each selected packet.

21. (Original) The system of claim 19 further comprising a process that determines a latency for each selected packet based on the information corresponding to the sender and receiver timestamps.

22. (Original) The system of claim 21 wherein the receiver process includes the process that determines each latency.

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23. (Original) The system of claim 21 further comprising, a process that normalizes each latency.

24. (Original) The system of claim 21 wherein the sender system includes a sender clock that maintains time at a first rate and the receiver system includes a receiver clock that maintains time at a second rate, and further comprising, a process that adjusts each latency to compensate for a difference between the first rate and second rate.

25. (Original) The system of claim 21 further comprising, a process that compensates for a timer jump.

26. (Original) The system of claim 19 further comprising a noise generator connected to the network, and a noise sink connected to the network.

27. (Original) The system of claim 19 wherein the sender component runs in a kernel mode of the sender.

28. (Original) The system of claim 19 wherein the receiver component runs in a kernel mode of the receiver.

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29. (Currently Amended) A computer-readable medium having stored thereon a data structure, comprising:

a first field ~~comprising~~ operable to store data representative of a packet send time;

a second field ~~comprising~~ operable to store data representative of a packet receive time; and

a third field ~~comprising~~ operable to store data representative of a packet latency time.

30. (Original) The data structure of claim 29 wherein the computer-readable medium comprises a data transmission medium.

31. (Original) The data structure of claim 29 further comprising, a fourth field comprising data representative of a packet sequence number.

32. (Original) The data structure of claim 29 wherein the packet latency time is normalized relative to another packet latency time.

33. (Original) The data structure of claim 29 wherein the packet send time is normalized relative to another packet send time.

34. (Original) The data structure of claim 29 wherein the packet receive time is normalized relative to a packet send time.

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35. (Currently Amended) A computer-readable medium having stored thereon a data structure, comprising:

a first field ~~comprising~~ operable to store data representative of a packet sequence number;

a second field ~~comprising~~ operable to store data representative of a packet send time suitable to determine a latency; and

a third field ~~comprising~~ operable to store data representative of a packet receive time suitable to determine a latency.

36. (Original) The data structure of claim 35 wherein the computer-readable medium comprises a data transmission medium.

37. (Original) The data structure of claim 35 further comprising, a fourth field comprising data representative of a packet latency.

38. (Original) The data structure of claim 37 wherein the packet send time, packet receive time and packet latency time are each normalized.

~~40~~39. (Currently Amended) A method for obtaining information for packets transmitted over a network, comprising:

transmitting a plurality of test packets from a sender to a receiver, and for each transmitted packet:

writing a sequence number into a first field; and

writing a sender-relative timestamp suitable to determine a latency into a second field;

and,

receiving at least some of the plurality of test packets, and for each packet received:

writing a ~~sender~~receiver-relative timestamp suitable to determine a latency into a third field; and

maintaining information corresponding to the sequence number, the sender-relative timestamp and the receiver-relative timestamp.

~~41~~40. (Currently Amended) The method of claim ~~40~~39 wherein the information corresponding to the sender-relative timestamp and the receiver-relative timestamp includes a value indicative of a latency.

~~42~~41. (Currently Amended) The method of claim ~~41~~40 wherein the value indicative of the latency is normalized relative to at least one other latency.